



JP-2823

PTO/SB/21 (12/97)  
Approved for use through 9/30/2000. OMB 0651-0031  
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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<b>TRANSMITTAL FORM</b> (to be used for all correspondence after initial filing)		Application No.	09/475,104
		Filing Date	December 30, 1999
		First Named Inventor	Nagesh Vodrahalli
		Group Art Unit	2823
		Examiner Name	Deven M. Collins
Total Number of Pages in This Submission	13	Attorney Docket Number	42390P6785

ENCLOSURES (check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment / Response <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application  <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition Routing Slip (PTO/SB/69) and Accompanying Petition <input type="checkbox"/> To Convert a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Small Entity Statement <input type="checkbox"/> Request for Refund	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Additional Enclosure(s) (please identify below): <div style="border: 1px solid black; height: 60px; width: 100%;"></div>
Remarks		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	William W. Schaal, Reg. No. 39,018 BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP
Signature	
Date	9-24-01

CERTIFICATE OF MAILING/TRANSMISSION			
I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class mail with sufficient postage in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on:			
September 24, 2001			
Typed or printed name	Laura R. Robles		
Signature		Date	September 24, 2001

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PTO/SB/17 (12/99)  
Approved for use through 09/30/2000. OMB 0651-0032  
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

# FEE TRANSMITTAL for FY 2000

Patent fees are subject to annual revision.

Complete if Known

Application No. 09/475,104  
Filing Date December 30, 1999  
First Named Inventor Nagesh Vodrahalli  
Examiner Name Deven M. Collins  
Group/Art Unit 2823  
Attorney Docket No. 42390P6785

TOTAL AMOUNT OF PAYMENT (\$) 0.00

## METHOD OF PAYMENT (check one)

1. ☒ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:
- Deposit Account Number 02-2666
- Deposit Account Name Blakely, Sokoloff, Taylor & Zafman LLP
- ☒ Charge Any Additional Fee(s) Required Under 37 CFR §§ 1.16, 1.17, 1.18 and 1.20.
- ☐ Applicant claims small entity status. See 37 CFR 1.27.

2. ☐ Payment Enclosed:
- ☐ Check ☐ Credit card ☐ Money Order ☐ Other

## FEE CALCULATION

### 1. BASIC FILING FEE

Large Entity	Small Entity	Fee Code	Fee (\$)	Fee Description	Fee Paid
101	201	710	355	Utility filing fee	
106	206	320	160	Design filing fee	
107	207	490	245	Plant filing fee	
108	208	710	355	Reissue filing fee	
114	214	150	75	Provisional filing fee	

SUBTOTAL (1) (\$)

### 2. EXTRA CLAIM FEES

Large Entity	Small Entity	Fee Code	Fee (\$)	Fee Description	Fee Paid
103	203	18	9	Claims in excess of 20	
102	202	80	40	Independent claims in excess of 3	
104	204	260	135	Multiple Dependent claim, if not paid	
109	209	80	40	**Reissue independent claims over original patent	
110	210	18	9	**Reissue claims in excess of 20 and over original patent	

SUBTOTAL (2) (\$) 0.00

## FEE CALCULATION (continued)

### 3. ADDITIONAL FEE

Large Entity	Small Entity	Fee Code	Fee (\$)	Fee Description	Fee Paid
105	205	130	65	Surcharge - late filing fee or oath	
127	227	50	25	Surcharge - late provisional filing fee or cover sheet.	
139	239	130	130	Non-English specification	
147	247	2,520	2,520	For filing a request for reexamination	
112	212	920*	920*	Requesting publication of SIR prior to Examiner action	
113	213	1,840*	1,840*	Requesting publication of SIR after Examiner action	
115	215	110	55	Extension for response within first month	
116	216	390	195	Extension for response within second month	
117	217	890	445	Extension for response within third month	
118	218	1,390	695	Extension for response within fourth month	
128	228	1,890	945	Extension for response within fifth month	
119	219	310	155	Notice of Appeal	
120	220	310	155	Filing a brief in support of an appeal	
121	221	270	135	Request for oral hearing	
138	238	1,510	1,510	Petition to institute a public use proceeding	
140	240	110	55	Petition to revive - unavoidable	
141	241	1,240	620	Petition to revive - unintentional	
142	242	1,240	620	Utility issue fee (or reissue)	
143	243	440	220	Design issue fee	
144	244	600	300	Plant issue fee	
122	222	130	130	Petitions to the Commissioner	
123	223	50	50	Petitions related to provisional applications	
126	226	180	180	Submission of Information Disclosure Stmt	
581	281	40	40	Recording each patent assignment per property (times number of properties)	
146	246	710	355	Filing a submission after final rejection (37 CFR 1.129(a))	
149	249	710	355	For each additional invention to be examined (37 CFR 1.129(b))	
179	279	710	355	Request for Continued Examination (RCE)	
169	269	900	900	Request for expedited examination of a design application	

Other fee (specify) \_\_\_\_\_  
Other fee (specify) \_\_\_\_\_

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$)

## SUBMITTED BY

Complete (if applicable)

Name (Print/Type) William W. Schaal  
Registration No. (Attorney/Agent) 39,018  
Telephone (714) 557-3800  
Signature [Signature]  
Date 09/24/01

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10-01-01  
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Docket No.: 42390P6785

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

RECEIVED  
SEP 28 2001  
TECHNOLOGY CENTER 2800

In re Application of:

Vodrahalli, et al.

Application No.: 09/475,104

Filed: December 30, 1999

For: High Performance Thermal Interface  
Curing Process for Organic Flip Chip  
Packages

Examiner: Deven M. Collins

Art Group: 2823

AMENDMENT AND RESPONSE TO THE OFFICE ACTION

Assistant Commissioner for Patents  
Washington, DC 20231-9998

Sir:

In response to the outstanding Office Action, mailed July 05, 2001, please amend the above-identified Application as follows:

IN THE SPECIFICATION

Please amend the Specification as follows:

Please replace the paragraph beginning at page 6, line 16 with the paragraph below:

A1  
As shown in Fig. 2b the thermal element 24 is placed onto the thermal epoxy 22 and the epoxy 22 is cured by a microwave generator 28. The microwave generator 28 generates energy at a microwave frequency that is directed into the thermal epoxy 22. The microwave frequency can be selected to cure the thermal epoxy 22 without damaging the integrated circuit 12 or heating the other components of the package 10. Not heating the other package components eliminates package warpage and epoxy pumping that can create air gaps and